## HANDBOOK OF PHONOLOGICAL DATA FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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710 Haida	710 Haida	710 Haida
01 p <sup>01</sup> [p-unreleased]02 60	20 q-ejective-labialized 21 t/s-hacek <sup>01</sup>	39 1
02 p-aspirated <sup>03</sup> 30	*[s]	40 1-fricative
03 +01	22 t/s-hacek-aspirated	41 l-preslottalized <sup>32</sup>
[t-unreleased] 02 60	23 t/s-hacek-ejective It/s-ejectivel <sup>05</sup>	42 glottal stop
04 t-aspirated <sup>03</sup>	(free)	43 h
05 t-ejective	24 d/1 <sup>06</sup>	•
06 c <sup>01</sup>	25 t/l-fricative-aspirated <sup>03</sup>	•
07 c-aspirated <sup>03</sup>	26 t/l-fricative-ejective	•
08 c-ejective	27 s <sup>62</sup>	50 i [iota]33 63
09 k <sup>01</sup>	(tag(-),allo) */t/s-hacek/	(free) */a/
10 k-aspirated <sup>03</sup>	28 c-fricative	[e] <sup>33</sup> (free)
11 k-ejective	29 ×	51 a
12 k-labialized <sup>01</sup>	30 x-labialized	*( i o ta) [ash] <sup>64</sup>
13 k-aspirated-labialized <sup>03</sup>	31 x-uvular <sup>61</sup>	[schwa] 07 65 (free)
14 k-ejective-labialized	(tag(-),free) */q/	[l-syllabic] <sup>66</sup> (free)
15 q <sup>01 04</sup> *[x-uvular]	32 x-uvular-labialized	52 upsilon
<pre>*!x-uvular; [gamma-uvular]61 (free)</pre>	33 m <sup>31</sup>	[o] (free)
	34 m-preglottalized <sup>31</sup> 32	53 yod
16 q-aspirated <sup>03</sup>	35 n	54 yod-preglottalized <sup>32</sup>
17 q-ejective	36 n-preglottalized <sup>32</sup>	55 w <sup>34</sup>
18 q-labialized <sup>01</sup>	37 eng	56 w-preglottalized <sup>32</sup>
19 q-aspirated-labialized <sup>03</sup>	38 eng-preglottalized <sup>32</sup>	·

- 710 \$a Haida \$b Skidegate \$d Na-Dene \$e Queen Charlotte Islands, British Columbia; SE Alaska \$f 200 \$g Jim Lorentz \$g Marilyn Vihman (review)
- 710 \$a Sapir, Edward \$b 1923 \$c The Phonetics of Haida \$d IJAL 3-4.143-158 \$q informant \$r "a few hours"
- \$\( \)\$ LONG VOWELS \$\( \)\$ It is not clear whether vowel length is predictable. "Quantity is a difficult matter in Haida...; the actual quantitative variations are clearly largely due to secondary lengthenings and shortenings of the fundamental vowel.... I suspect that the distribution of quantities is the resultant partly of inherent quantitative distinctions...partly of a tendency to establish a rhythmic equilibrium. This equilibrium seems to depend on several factors, chief among which are the nature of the syllable (a closed syllable tends to be short, an open one long), the place of accent, and the grouping of syllables in phrases. It is impossible to give rules at the present." (p.155)
- 710 \$a PHONOLOGICAL WORD \$A initial CC: /s, l-fricative/ + stop; /s/ + /t/l-fricative/ \$A final C: /p, t, l, l-fricative, t/l-fricative/; nasals
- \$a STRESS \$A "It is clear that a given word is regularly accented on a certain syllable.

  Generally this is the first [syllable]." (p.157) "Further, it is evident that the stressed syllable may lose its stress, as it reduces its quantity, in a given setting in the sentence or when the addition of one or more syllables changes the rhythmic pattern of its syllables" (p.157) "These alternations of stress may be purely rhythmic phenomena for the most part, but I doubt if they are entirely so." (p.157) Sapir then gives one minimal pair and several near

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minimal pairs which indicate the possibly functional nature of stress in Haida. "The question of stress is complicated by that of pitch. The stressed syllable is higher in pitch than the other syllables of the word. At the same time it seemed to me that a low-pitched syllable might very well bear a secondary stress so strong as to bring up the question whether, after all, what I have been making (sic) stress in this paper is not primarily a matter of relatively high pitch, only secondarily one of stress." (p.157)

- 710  $\Rightarrow$ a SYLLABLE  $\Rightarrow$ A (C)(C)V(G)(C)(C)
- \$\frac{\pmatrix}{\pmatrix}\$ \$\frac{\pmatrix}{\pmatrix}\$ A The analysis of the vowel system is probable rather than certain. "The vocalic nuances seem to be due primarily to secondary phonetic causes rather than to basic etymological differences. It is quite probable that there are only three organically distinct vowels: 'a, i, u.' Each of these runs through a gamut of quantities and qualities that give the language a far greater vocalic variety than the simplicity of the fundamental vowel scheme would argue."

  (p.154)
- 710 <sup>01</sup> \$A "It is possible that the Haida intermediates [voiceless unaspirated series] are sonant at the moment of release, but their general effect, if carefully heard, is certainly not that of sonants." (p.145)
- 5A Syllable-final /p/ and /t/ "impress the ear as the normal English 'p' and 'k' [sic] in which the breath release has been suppressed." (p.146)
- 710 03 \$A The aspirated stops are more strongly aspirated than the English phones. (p.146)
- 710 04 \$A /q/ "is generally a very firmly pronounced stop, but it seemed to me that a faint uvular trill could sometimes be detected between the 'q' and a following vowel." (p.145)
- 710 05 \$A /t/s-hacek-ejective/ tends "to move front." (p.147)
- 710  $^{06}$  \$A "The []] of /d/]/ is fully voiced. I suspect that the [d] of /d/]/ is at least partly voiced also." (p.145)
- 710 <sup>07</sup> \$A Sapir uses the symbol "alpha" for reduced /a/, which never occurs long. (p.154)
- 5A Sapir did not himself hear /p-aspirated/, but assumes its existence on the basis of Swanton's data. (Swanton, J.R. 1910. Haida, an illustrative sketch. Bureau of American Ethnology. Bulletin 40, pt.1, pp.205-282.) Given the absence of a "p-ejective" phoneme, it is quite possible that "p-aspirated" is also non-existent in Haida. Except for /w/, /w-preslottalized/ and /m/ (syllable finally), "...labials are very uncommon in Haida." (p.145)
- 710 31 \$A /m/ "...is not rare as syllable final...[but] most, if not all, examples of initial /m/ and /m-preglottalized/ may be suspected of occurring in Tsimshian loan words." (p.145)
- 710 <sup>32</sup> \$A The glottalized masals are not common in Haida, whereas /w-preglottalized/, /yod-preglottalized/, and /l-preglottalized/ "are exceedingly common sounds." (p.149)
- 710 <sup>33</sup> \$A /i/ is most often realized as [iota] when short, [i] when long. [e] is less common. (p.155)
- 710 <sup>34</sup> \$A Plain /w/ "does not seem to be as common a sound as /w-preglottalized/." (p.149)
- 710 <sup>60</sup> \$A /p/ and /t/ are unreleased syllable-finally. (p.146) (No other stops occur syllable-finally.)
- 710 61 \$A /q/ may be realized as [gamma-uvular] intervocalically ("sometimes" (p.145); "rather frequent" (p.151)), and as [x-uvular] after /l-fricative/ (less often). (p.151)
- 710 62 \$A /t/s-hacek/ becomes [s] syllable-finally. (p.147)
- 710 <sup>63</sup> \$A Unstressed /a/ may be realized as [iota] after palatoalveolar affricates or between lateral and /eng/. (p.154)
- 710 64 \$A /a/ is realized as [ash] after palatal stops and fricatives or /yod/. (p.154)
- 710 65 \$A /a/ may be realized ("very frequently") as [schwa], especially before masals. (p.154)
- 710 <sup>66</sup> \$A [schwa] may be realized as [l-syllabic] after a lateral. (p.154)